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# KEY TO GEOGRAPHICAL TERMS.



Plains - green; Tablelands - yellow; Mountains - brown

# Blackwoods' Educational Series EDITED BY PROFESSOR MEIKLEJOHN

# FIRST GEOGRAPHICAL READER

STANDARD II.

SHAPE OF THE WORLD
DIVISIONS OF LAND AND WATER
THE LIFE OF A RIVER



LONDON AND EDINBURGH
WILLIAM BLACKWOOD AND SONS
1883

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# CONTENTS.

# (The poetical pieces are indicated in italics.)

1.	The Shape of the World, I.									. P	AGE 5
	The Shape of the World, II.	-						-	_		8
	The Size of the World, I.			·			Ċ				11
	The Size of the World, II.				·	·			i		13
	Land and Water										14
	Land and its Divisions, L.										16
	Land and its Divisions, II.										18
	Land and its Divisions, III.										21
	Two Lighthouses										23
	Land and its Divisions, IV.										24
	Land and its Divisions, V.										27
	Land and its Divisions, VI.								•		28
	Mountains and Hills, I								·		80
	The Chalk Cliffs of Dover .										84
	Mountains and Hills, If.										84
•	Mountains and Hills, III.										36
	My Native Hills										88
	Mountains and Hills, IV.										89
	The Plain and the Mountain,	I.									42
20.	The Plain and the Mountain,	11.									45
	Water and its Divisions, I.										48
	Water and its Divisions, II.										50
	By the Sea-shore, I	_									52
	By the Sea-shore, II.										54
	Evening by the Sea-shore .						•				57
	Water and its Divisions, III.										58
	Water and its Divisions, IV.										60
	G.R.	•	-	•	•						-

# CONTENTS.

28.	Water and its Divisions,	v.					64
29.	A Brooklet						66
BO.	Water and its Divisions,	VI.					67
31.	Water and its Divisions,	VII.					71
32.	The Life of a River, I.						74
33.	The Life of a River, II.						76
34.	A Mountain Stream .						79
35.	The Life of a River, III.						80
36.	The Life of a River, IV.						83
37.	Political Divisions, 1.						86
38.	Now the Sun is Sinking						89
39.	Political Divisions, II.						90
Ю.	England						93
	Doffnitions						OΕ



# FIRST

# GEOGRAPHICAL READER.

# 1.—THE SHAPE OF THE WORLD.— I.

1. The World a Ball.—The world we live on is round. But it is not round like a plate. It is like

a ball in shape, or, rather, like an orange. It is one of a number of worlds that keep going round and round the sun; and it is from the sun that these worlds get both



light and heat. What could we do without light? And if the sun did not send us heat, we should all die of cold. Without light and heat neither plants,

nor animals, nor men could live. On the first page is a picture of the earth, with the moon, its nightly servant, beside it in the sky.

- 2. The Orange and the Fly.—If we took an orange, and hung it up by a string, and placed a fly upon the orange, the fly could walk round and round it without ever stopping. It could walk round the orange with its head always in the same direction. If it kept always walking to the right, it would go round it and come back to the place from which it If it kept walking to the left, it would go round it, and come back also to the place from The orange would be to the fly which it set out. pretty much what the world is to us. We can go round the world always keeping our face in the If this ball on which we live were same direction. all land, we could set out from the front door of our house, walk round the world, and without turning our heads, come back to our own house again.
- 3. Half a World.—Now, when we try to draw a picture or a map of the world upon paper, we find that we cannot draw both sides of it; for the simple reason that we cannot see both sides of a ball at the same time. The sun, that shines upon all things, high up in the sky as he is, cannot shine on both sides of our world. He can only shine on one half of it at one time. One half of the ball is always in light; and one half is always in darkness.

We can easily see this for ourselves, if we take a ball or orange, put a long wire or knitting needle

through it and hold it up against a lamp. One half is white, the other half is black; one half is in light, the other half is in darkness.

4. The Two
Halves. — If, then,
we want to draw
a plan or map of
our ball or orange



upon paper, we must cut the ball or orange into two parts, and then draw it. Then we should draw two plans or maps—a map of each half of the ball. Thus we should have two half-balls or half-globes. A globe is sometimes called a sphere; and a half-globe is called a hemisphere. The hemisphere on the right in ordinary maps is the Eastern Hemisphere; the hemisphere on the left is the Western Hemisphere.

or'-ange	ser'-vant	dark'-ness	east'-ern
num'-ber	pic'-ture	knit'-ting	hem'-i-sphere
an'-i-mals	sim'-ple	nee'-dle	west'-ern
night'-ly	rea'-son	or'-din-ary	

In the same direction, pointing the | Hem'-i-sphere. Hemi means half, so same way.

## 2.—THE SHAPE OF THE WORLD.—II.

- 1. The Globe not all Land.—If we look at these two hemispheres, we shall see that our globe is not wholly made up of land. There is a great deal of land; but the globe is not all land. If our earth were all land, we could make a railway right round it, and go easily round the earth in a few weeks. And, like the fly on the orange, the train could go round and come back to the place from which it started, with the head of the engine always pointing in the same direction.
- 2 Not all Water.—Nor is our globe all covered with water. There is a very great deal more of its surface covered with water than with land; but yet there are large breadths of land also. If our globe were entirely covered with water, we could easily go round the world in a steamer in about two months. But, as the land juts out with long points into the water, the steamer cannot make a straight course. She has to take long round-about turns, so that she may not bump up against the land and be broken in pieces.
- 3. Shape of the Land.—If we look carefully at the land in the two hemispheres, we shall see that it is very broad in the north and very narrow in the south; and that the land tapers off very much as it

goes down to the south. We shall also see that there is a great deal more land in the northern halves of the globe than in the southern. Broad land in the north, narrow land in the south—that is how the land on our globe is set in the water!

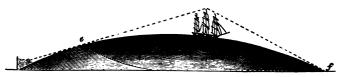
- 4. Shape of the Water.—Again, we have great breadths of water in the south, and narrow breadths in the north. There is much more water in the southern half of the globe than in the northern. The water, unlike the land, tapers towards the north, and broadens out towards the south. We may say, then, that we have broad stretches of water in the south, and narrow stretches of water in the north.
- 5. The Globe.—Our earth, then, is a ball or globe, and no part even of the water is quite flat or level. When a sailor is leaving the port, and bidding goodbye to his friends and his native land, he often climbs the mast to see the old shores again, when they have sunk out of his sight as he stands on deck; and, as the shores sink down below the round bend of the water, he goes higher and higher up the mast in order that he may see further. If he stands on deck, he sees only from a to b.



If he climbs half-mast high, he sees more; he sees as much as this—he sees from c to d.



But if he climbs to the top of the mast, he sees much farther—he sees from e to f.



And so, if he goes high enough up the mast, he can look over the curve of the water, and keep his own native land, and the shores where his friends dwell, in sight for a long time. And so he stays up on this high point as long as he can.

"The sailor sighs as sinks his native shore,
And climbs the mast to feast his eyes once more;
And, as from topmost point he views the land,
He bids a sad good-bye to the beloved strand."

whol'-ly	bro
sur'-face	pie
cov'-ered	stre

o'-ken bid'-c ec'-es climb retch'-es curve

bid'-ding sail'-or climbs top'-most curve be-loved'

En'-gine, a machine used for driving trains and other things.

En-tire'-ly, altogether.

Bump, knock against.

Ta'-pers, runs off to a point.

Na'-tive land, the land in which a person is born.

Strand, the shore.

### 3.—THE SIZE OF THE WORLD.—I.

1. Two Measurements.—The earth we live on is very large. But, large as it is, it has been measured. It has been measured round; and it has been measured through. If we take an orange, and put

a piece of string right round the middle, and then measure that piece of string on a foot-rule, we shall know how many inches round the orange is. If, again, we take a piece of wire, and put it through the orange from one side to the other, and then



measure the piece of wire, we shall know how many inches the orange measures through.

2. Distance Round.—The earth has also been measured round. The distance round the earth is about 25,000 miles. Distance round is called circumference. We may therefore say:

The circumference of the earth is about 25,000 miles.

3. Walking.—If the earth were all land, and we set out to walk round it, we should take a very long time. Let us suppose that we can walk three miles an hour. This is not much. Let us suppose, further,

that we could walk at this rate ten hours a-day. This is a good deal. Three miles an hour for ten hours would make thirty miles a-day. Walking six days in the week, we should have travelled, every week, a distance of a hundred and eighty miles. At this rate we should need nearly a hundred and thirty-nine weeks to make the journey. But a hundred and thirty-nine weeks is about two years and eight months. From all this we learn that, if we could walk so far, it would take two years and eight months to walk round the world.

4. Sailing.—But let us suppose that the world were all water, and that we could sail round it. Then, if we were to have steady breezes and good weather, and if we sailed at the rate—taking one day with another—of ten miles an hour, we should go round the world, sailing day and night, in about a hundred and four days. In other words, we should sail round the globe we live on in about fifteen weeks.

meas'-ure dis'-tance sup-pose' stead'-y mid'-dle cir-cum'-fer-ence trav'-elled wea'-ther

Meas'-ure-ment, the finding of the size of anything.

#### 4.—THE SIZE OF THE WORLD.—II.

- 1. Steaming.—But suppose we took a steamer, and suppose that steamer were one of the fastest known! Now the fastest rate run by our best steamers is twenty miles an hour. Suppose, again, that we had very fine weather all the way, and that we met with no strong winds to drive us back, and no furious storms to stop us, then we should make twenty miles an hour all the way. In that case we should take fifty-two days, or nearly seven and a half weeks, to sail quite round the world.
- 2. Travelling by Rail.—Let us now suppose another thing, and a quite different thing. Let us suppose that the world is all land, and that a railway has been made round it. If, now, we travelled on this railway at the usual rate of trains, which is thirty miles an hour, it would take us five weeks to go round the globe, travelling day and night. But, if we went at the highest speed of express trains, which is sixty miles an hour, then we should take only seventeen days to go round the world.
- 3. Distance Through.—If we could push a steel wire through the very middle of the earth, from a point on the one side to the opposite point on the other, we should find that the distance through is

about 8000 miles. Now distance through is called diameter. We may therefore say:

The diameter of our earth is about 8000 miles.

4. Difficulties. — But some one may say: "The earth cannot be round! Look at the high mountains and the deep valleys! Look, too, at the great depths in the bed of the deep, deep seas!" answer to this is: "These heights and hollows on the surface of the earth seem to be great. they are in fact no more to the size of the big round world than the roughness of the skin of an orange is to the roundness of the orange!" orange is rough too, but it is round; and its roughness does not take away from its roundness.

dif'-fer-ent	high'-est	dif'-fi-cul-ties	an'-swer
rail'-way	op'-pos-ite	moun'-tains	heights
u'-su-al	di-am'-e-ter	depths	rough'-ness

Steam'-er, a vessel that is driven | ry letters and run in the shortest through the water by steam. Fu'-ri-ous, very strong and raging. Ex-press trains, fast trains that car- rising grounds.

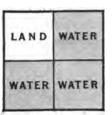
possible time. Val'-ley, a grassy hollow between two

# 5.—LAND AND WATER.

1. How much of each.—We have seen from the map that there is upon our globe far more water than land. There is, indeed, three times as much water as land. That is to say, for every acre of

land there are three acres of water; for every mile of land there are three miles of water.

2. The Surface of both.—The water on the globe *looks* quite level, and people often talk about the level of the sea. In a storm,



its surface rises into high waves or billows; but this is very little. This makes as little difference to its level as the little roughnesses on a painted wall make to the flatness of the wall. . The land on the globe is far from being level. We could hardly find a single field in the whole world that is perfectly flat or level; and in many places the land rises into very high ground. In some parts of the world these high grounds or mountains, as they are called, are more than five miles high,—they rise more than five miles up into the air.

3. The Characters of Land and Water.—The land under our feet is firm; the water is always moving. Even when the water in a small pond seems to be standing quite still, there is always some little movement going on from one part of the pond to another. The land always looks the same—green when it is covered with grass, red or brown when the land is ploughed, white where there are bare

chalk rocks. But the water of the sea is always changing in colour: sometimes it is blue, sometimes it is green; at other times grey, or even white; now a muddy brown, now a deep black, and at other times an angry purple. The water, in fact, takes its colour chiefly from the colour and look of the sky above it.

4. Heights and Hollows.—There are great heights upon the land, and there are also very deep hollows. And if we could go down to the bottom of the sea and walk about there, we should find there also high heights and deep hollows. We should see parts of it rising up in very steep sides from the bed of the sea, just as we see them in the drawing.

lev'-el flat'-ness ploughed mud bil'-lows quite chalk mud	
--	--

Char'-ac-ter, look; appearance.

Bed of the sea, the land which forms the bottom of the sea.

# 6.—LAND AND ITS DIVISIONS.—I.

- 1. The Largest Masses of Land.—The largest piece of land we speak about is called a Continent. A continent is a piece of land which contains several countries. Or, that piece of land which contains several countries is called a Continent.
- 2. The Continents and their Number.—There are six continents in the world. In the Eastern Hemi-

sphere there are four: Europe, Asia, Africa, and Australia. In the Western Hemisphere there are two: North America and South America. England forms part of the island of Great Britain; and this island belongs to the continent of Europe.



The Two Hemispheres.

- 3. The Size of the Continents.—By far the largest continent is Asia. Its greatest breadth runs from west to east. Africa is the second largest. Australia is the smallest continent, and Europe is the second smallest.
- 4. Islands.—An island is a piece of land surrounded on every side by water. Great Britain is an island, and England is the southern part of it. Ireland is another island, which lies to the west of Great Britain. The word island means water-land—that is, land set in the water. A small isle or island is called an islet; just as a little stream is called a streamlet, and a little brook a brooklet.

5. The Number of Islands.—There are many thousands of islands on the globe-

> "Gems of the waters-with each hue Of brightness set in ocean's blue!"

Some of them are mere rocks, which show themselves just above the sea. These serve only as resting-places for birds that have been tired out by gusts of the strong beating winds. There are several thousands of islands lying around Great Britain. Most of these lie off the west coast of Scotland. The three largest of the islands which lie near England are, the Isle of Wight, in the south; the Isle of Anglesea, in the north of Wales; and the Isle of Man, which lies in the Irish Sea. The Isle of Man lies at nearly equal distance from England, Scotland, and Ireland.

con'-tin-ent	Af'-ri-ca	island	beat'-ing
Eu'-rope	Aus-tra'-li-a	(i'-land)	sev'-er-al
A'-si-a	A-mer'-i-ca	bright'-ness	An'-gle-sea

Con-tains', holds. in gold; the islands are gems set in the ocean.

Hue. colour. Gems, precious stones, generally set Gust, a strong and sudden gale of wind.

# 7.—LAND AND ITS DIVISIONS.—II.

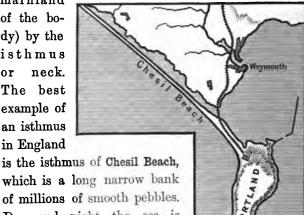
1. The Mainland.—When we speak of the land off which an island lies, we call it the mainland.

Thus a sailor in the Isle of Man would say he was going to the mainland if he left his own island and went to Liverpool. And yet Liverpool itself is on an island; but that island is much larger than the Isle of Man. . Europe is the mainland to England; England to the Isle of Wight; and the Isle of Wight is the mainland to the small rocks and islands that lie off its coast. . . Again, Wales is the mainland to Anglesea; and Anglesea the mainland to Holy Island. . Once more, England or Ireland, or Scotland, is the mainland to the Isle of Man. And the Isle of Man is itself the mainland to the smaller island called the Calf of Man.

- 2 Peninsulas.—A peninsula is a piece of land almost surrounded by water. The word peninsula means almost-an-island. There are very few peninsulas in England. At the very end of England, in Mount's Bay, there is a rock called St Michael's Mount. This rock rises out of the sea at about three miles from Penzánce—the last town in the west of this country. When the tide is up, it is an island; when the tide has gone back, it is a peninsula. . . But perhaps the best example of a peninsula in our country is the peninsula of Portland, in Dorsetshire. It is a hill of stone, out of which is cut the famous Portland stone, which is so much used in building.
  - 3. An Isthmus.—The word isthmus is a word that

The neck of land which joins one means neck. piece of land to another is called an isthmus. we look at the human body we may call the head a For the head is joined to the trunk (or peninsula.

mainland of the body) by the isthmus neck. or The best example of an isthmus in England



Day and night the sea is always rubbing these pebbles against each other; and hence they are highly polished, very

Peninsula and Isthmus.

round, and of different sizes; while they are of very different colours. The noise they make in a storm is something very odd and terrible.

main'-land pen-in'-su-la sur-round'-ed Port'-land

isthmus (ist'-mus) peb'-bles ter'-ri-ble

### 8.—LAND AND ITS DIVISIONS.—III.

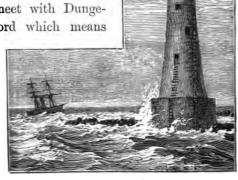
- 1. Capes.—A piece of land which juts out into the sea is called a cape. The most striking cape in the west of England is the Land's End. The most striking capes in the east of England are the North Foreland and the South Foreland. Again, in the north, we see the long low spit of land called Spurn Point. . . If a cape is high, rocky, or mountainous, it is called a headland or a promontory.
- 2. Kinds of Capes.—Capes are of many kinds, and made of many kinds of rock or earth. There are some capes made of granite—the hardest rock in England; some of chalk; some of clay. There is the low clay spit of Dungeness; there are the high chalk cliffs of Beachy Head; and the bold red granite cliffs of Devon and Cornwall.
- 3. The Different Names for Capes.—(i) The beak of a bird is a kind of cape; the nose or chin of a man is a kind of cape; and so is his head. Indeed, the word cape is a word that simply means head. We find capes in different parts of England with all these names—bills, heads, and noses. Nay, there is a cape in the south of England that is called a tail. There is a pretty little bird that comes to us in summer, and goes away in winter. It has a red tail, and is hence called the redstart.

The cape which stands out at the *tail* of England in the south of Devonshire is called **Start Point**.

4. The Different Names for Capes.—(ii) The name head is the most common. There is Flamborough Head on the east coast, Beachy Head on the south,

and St David's Head on the west. Then, again, there is Portland Bill in the south. In Essex, in the east of England, we find the Naze—a word which means simply nose; and if we go to the south, we meet with Dungeness—a word which means

Danger Nose. Farther north, in the south of a country called Norway, we find a high



Eddystone Lighthouse.

and bold cape called **The Naze.** . . It is very strange that, if you sail round the coast of England, you will not find a single point which is called by the name of cape—they are all heads, or tails, bills, or noses.

5. Lighthouses.—Capes are often dangerous to

ships in storms or in a high wind; and vessels have to keep away from them. They have to stand well out to sea; or they might be thrown upon the rocks of a headland and dashed in pieces by the fury of the waves. Hence lighthouses have been built upon all the chief capes along our coasts. Their strong friendly light, shining for miles and miles out to sea, shows the sailor what he must keep away from, and how he must guide his ship, if he wishes to reach his port in safety.

Gran'-ite, a very hard rock made up of | —grey, red, and almost black.
small crystals. It is of three kinds | Dan'-ger-ous, full of danger.

## 9.—TWO LIGHTHOUSES.

 Two white angels of the sea, Guiding way-worn wanderers home; Sentinels of hope they be,

Drenched with sleet, and dashed with foam,— Standing there in loneliness,

Watch and ward o'er ships to keep; Through the midnight slumberless, That the quiet shore may sleep. 2. Two bright eyes awake all night
To the dashing of the sea;
Eyes that only close when light
Dawns on lonely hill and lea.
Oh, kind watchers! teach us, too,
Steadfast courage, patience long!
When an eye is turned to you,
Then should human heart grow strong.

L. LARCOM.

an'-gels drenched lone'-li-ness mid'-night slum'-ber-less dash'-ing cour'-age pa'-tience

Wan'-der-er, one who has travelled in far lands.
Sen'-tin-els, guardians.

Sleet, a mixture of snow and rain. Ward, same word as guard. Stead'-fast, steady and true.

# 10.—LAND AND ITS DIVISIONS.—IV.

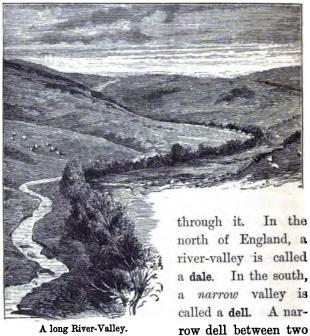
# Lowlands and Uplands.

1. Lowlands.—There are many parts of England and Scotland where the ground is very low, and rises only a little above the level of the sea. We can walk for miles without coming to a high rise in the ground. Such parts of any country are called lowlands. In the south-east of England—in Lincolnshire—there is a lowland that is very low. It is called Holland—a word which means hollow land. The ground here is so low, that the sea has to be

kept out by high dykes of earth and sand. . . But though there is a good deal of low ground in the world, we seldom see any that is quite flat. It is hardly ever as flat as the floor of a room. Besides, the fact that rivers can flow along grounds that look very level proves that the grounds must be tilted up a little—however little that may be.

- 2. Plains and Valleys.—(i) The two chief kinds of lowland are plains and valleys. A plain is a piece of land that is pretty level. We can walk upon it in any direction without coming to ground that rises very high. There is the Central Plain in the middle of England. There is the Plain of York —one of the most fertile districts in the whole of England, some parts of which are nearly as flat as a bowling-green. Then there is the Cheshire Plain. which grows good grass for cows, and gives us a great deal of capital butter and cheese. Its meadows are filled with beautiful soft-eyed cows; and, in the summer evenings, we may hear on every side the low of the milky kine, as they slowly wend their way home to their stalls.
- 3. Plains and Valleys.—(ii) Some plains have a river flowing through them; and these plains are often edged by rising ground on each side. Such plains are called valleys. The Valley of the Thames is one of the largest and richest valleys in England; the Valley of the Severn is another. A valley,

then, is a tract of low land that lies between rising ground on either side, and has a river flowing



ranges of hills is called a glen in the north. If it comes between two sets of steep lines of cliffs, it takes the name of a gorge.

lit'-tle lev'-el

tilt'-ed chief

plain eve'-nings nar'-row beau'-ti-ful

Dis'-trict, part of a country.

Fer'-tile, producing good fruit or grain.

#### 11.—LAND AND ITS DIVISIONS.—V.

- 1. Uplands.—The lands that are a little higher than lowlands are often called uplands. There are, in the east of England, many pieces of land that are higher than the land beside them; and these are very often of chalk. When a piece of upland ground is well marked off from the land beneath or beside it, it is called a hill.
- 2. Table-lands.—A high upland is called a table-land. A table-land is a large and broad piece of level land raised high above the surface of the earth. Just as the flat top of a table stands high above the floor, so the top of a table-land stands high above the land near the edge of the sea. Dartmoor, in Devonshire, is a high table-land; and Salisbury Plain, in Wiltshire, is a low, wavy table-land. Sometimes a table-land is a level plain on the top of a range of hills or mountains; and there are some table-lands in the world that lie about three miles up in the air.
- 3. Highlands.—In the north of England there are parts of land which rise very high up into the air—some of them even above the clouds. A country with very high land of this kind is called a highland country; and the districts with these very high rising grounds are called highlands. When a piece

of very high ground stands well and clearly out from the rest of the high and broken land, we call that piece of very high ground a mountain.



Section of Land.

4. Mountains.—We never see mountains rise from plains or from low lands. Mountains are always found in high country; and they most often rise from high table-lands. The highest mountain in England is Sca Fell; and it rises from a high table-land. The highest mountain in Wales is Snowdon; and it also rises from a very high table-land.

chalk	Salisbury	Wilt'-shire	piece
Dart'-moor	(Sals'-bur-y)	bro'-ken	high'-land
	•		_

Snow'-don means snow mountain.

# 12.—LAND AND ITS DIVISIONS.—VI.

1. Mountains and Hills.—(i) We always reckon the height of a mountain or of a hill, not from the land beside it, but from the level of the sea. We try to

fancy that we have drawn a line from the top of the hill to a point above the level of the sea, and then measure the distance from the top of that line to the sea-level. Or we can suppose that we are floating in a balloon, which has risen from the sea up into the air, until it is as high as the top of the mountain.

- 2. Mountains and Hills.—(ii) In England, a rising ground, the top of which is more than 2000 feet above the level of the sea, is called a mountain; if it is below that, we call it a hill. But many heights that are called mountains by us would be looked upon as quite low hills in other countries. For, in Asia, there are some mountains that are more than five miles high. This, however, we must remember: that two thousand feet is the limit which marks off a hill from a mountain.
- 3. Deserts.—A desert is a piece of land on which no plants or trees will grow. There are no deserts in England. But there are vast and wide deserts in the north of Africa and also in Asia. The largest desert in the world is the Sahara, a wide waste of sand and rock in the north of Africa. . . A spot in a desert where grass and trees grow is called an Oasis. In these spots there are springs; round the springs grass and shrubs and trees grow; and, while the springs give the weary and thirsty traveller water to drink, the trees supply a welcome

shade from the scorching and even burning rays of the sun.

 meas'-ure	o-a'-sis	re-mem'-ber
float'-ing	thirst'-y	des'-ert

Reck'-on, to count up.

A'-si-a, the largest continent in the
world. It lies east of Europe.

Lim'-it, the dividing line. Sup-ply', give. Scorch'-ing, very hot.

### 13.—MOUNTAINS AND HILLS.—I.

1. Rising Ground.—We have already seen that mountains and hills do not rise from low and level plains beside the sea; but that hills rise from uplands, and mountains from high lands. In low lands we find, or may find, gently swelling grounds, or rising grounds like Primrose Hill, in the north of London; but not high mountains.

Not from low lands—but lofty—mountains rise And lift their tops into the clouded skies.

2. Hills and their Kinds.—It is very pleasant to take a walk in a hilly country, and to follow the winding paths that run along the sides of the hills. New views open out every now and then upon the eye; and the constant change of scene makes us forget that we have walked a long way,—and we

do not feel tired in the least. We come, perhaps, to a low rounded grassy hill standing by itself: and that is called a knoll. Or we take a run up a little hill or hillock, and get new views in every direction. A good way to know the different kinds



Picture of Hills and a Strait.

of rising grounds, is to think how we could get to the top of them. We can run up a hillock; we could only walk up a hill; but, in the case of a mountain, we should most likely have to use both our hands and feet,—we could neither run nor walk, we should have to toil, climb, or clamber up many parts of it.

We run up a hillock; we walk up a hill; Up a mountain we toil, now and then standing still; For oft, in the clamber, we need a short rest As we make our way over the high mountain's breast.



Plan of Hills and a Strait.

3. Chains of Hills.—(i) In most parts of England, the rising grounds that we call hills run in chains, which go by different names. In the south of England, these long chains or ranges of hills are

called **Downs**: Thus we have the **North Downs**, which run through Surrey and the north of Kent. We have also the **South Downs**, which run through Sussex and the middle of Kent. The North Downs begin in a very narrow and well-marked range—about six miles in length—called the **Hog's Back**.

4. Chains of Hills.—(ii) Another name for such ranges of hills is Heights. Thus we have the East Anglian Heights, which start from the banks of the river Thames, and run in a north-easterly direction to the Wash. . . A third name for such a range of hills is Wolds. Thus we have the Yorkshire Wolds, in the south-east of Yorkshire, and the Lincolnshire Wolds, in the east of Lincolnshire.

Downs, Heights, and Wolds, are names of kinds of hills, From which there run a thousand merry rills.

5. Chalk.—All these ranges of hills, and, indeed, most of the hills of England, are of chalk. The chalk is often seen cropping out on a bare hillside, or looking down upon the sea in the form of white cliffs which face the stormy seas that beat upon the shores of Old England.

pleas'-ant clam'-ber thou'-sand mer'-ry scene Ang'-li-an Lin'-coln-shire storm'-y

Swell'-ing, rising up in long curves. Lef'-ty, high. Con'-stant, always going on. Rill, a small stream.

Crop'-ping out, appearing here and there.

### 14.—THE CHALK CLIFFS OF DOVER.

- 1. White cliffs of England, ye that stand
  As bulwarks to our native land!
  Forts that great Nature planted there
  To guard the home of brave and fair!
  How nobly ye the tempest brave,
  And scorn the high and angry wave!
- 2. White cliffs, when far upon the main The sailor longs for you again, He hopes once more to see you shine Above the Channel's foaming brine! For you are home to him and me, White cliffs that face the furious sea!

O. T. SMITH.

na'-tive guard plant'-ed no'-bly tem'-pest ang'-ry foam'-ing fu'-ri-ous

White cliffs, because they are made up of chalk.

Bul'-warks, defences.

Brave, face; stand up against. Main, the main sea or ocean.

## 15.—MOUNTAINS AND HILLS.—II.

1. Table-lands.—In some parts of England, when we climb the side of a mountain, we come—not to a peak—but to a long and broad stretch of land, almost level, and covered with grass or with heath. This kind of level country high up among moun-

tains is called a table-land. In the north of England it is called a fell, though we must not forget that the name fell is given most often to mountains. Thus we have Sca-Fell, which is the highest mountain in England, Cross-Fell, in the Pennine Range, and many others. . .

- 2 An Odd Name.—There is one mountain with an odd name in the Lake country. It is called Fairfield. But its older name was Far Fell—a name which meant Sheep-Fell, because the fell or high table-land of the mountain had a great deal of grass, and was good for sheep.
  - "Across the table-lands the evening sun Sends its long beams before the day is done. And here the daylight lingers ere it dies, While, far below, the vale in shadow lies."
- 3. Mountains. We have already learned that mountains do not rise from low lands near the level of the sea, but always from high lands or from tablelands raised a good deal above the sea-level. We shall find, if we look at the great and high mountains of the world, that, the higher the table-land is, the higher are the mountains which rise from it. . .
- 4. Names of Mountains.—In Scotland, a mountain is called Ben. Thus we have Ben More, the big mountain, and Ben Nevis, the snow-clad mountain. In Wales and England the word becomes Pen. Both forms, Ben and Pen, mean head. It is plain that

a mountain stands out clearly and plainly from the high land on which it stands, just as the head of a man stands out from his shoulders. Thus we find the chief set of mountains in England is called the Pennine Range—a name which simply means a row of heads—that is, a row of mountain heads. We have a high mountain in Yorkshire called Pennygant; and the highest hill in Buckinghamshire is called simply Pen. Again, a high hill in Berkshire is called Inkpen; and we find a great many pens in Cornwall, such as Pendennis and others.

In cold and rugged Scotland a mountain's named a Ben; In Wales the name is different, for there 'tis called a Pen; And even in southern England we find it now and then.

lev'-el	eve'-ning	Scot'-land	Pen'-ny-gant
Pen'-nine	beams	shoul'-ders	south'-ern

Lin'-gers, stays behind. | Rug'-ged, wild and hilly.

# 16.—MOUNTAINS AND HILLS.—III.

1. Shapes of Mountains. — Mountains are of all kinds of shapes; and the names of them often tell us about their shapes. Sometimes the shape of a mountain is like a sugar-loaf; sometimes like a round dome; sometimes like a pillar; and sometimes like a pike. We find in the Lake country an odd-looking mountain called Coniston Old Man; a

mountain that stands out like the gable of a house is called Great Gable; and one that is shaped like a saddle is called Saddle-back. In the same part of England we find a mountain called The Pillar; and, at the head of the lovely lake of Windermere, rise into the sky two tall and grand mountains called Langdale Pikes. In some of the mountainous parts of Europe, a mountain peak is called a needle, a stick, a tooth, or a horn.

A peak, a dome, a gable—Remember, if you're able;
A pillar or a pike,
To which the mountain's like;
And even a saddle-back—
Of names there is no lack!

- 2 Mountain Chains and Groups.—A long row of mountains is called a range or chain. Thus we have the Pennine Range in England and the Grampian Range in Scotland. But, where several mountain peaks stand near each other, they are called a group. Thus we have in Cumberland a group of high and noble mountains which are called the Cumbrian Group. Between each pair of mountains lies a narrow valley dark with woods,—each valley with its own lake, and out of each lake a river flows and makes its way to the sea. These lakes in the Cumberland District are called meres, as Windermere, Buttermere; and many others.
  - 3. Mountain Gaps.—There are often gaps between

two mountains, or between two mountain-ranges, through which travellers go when they have to travel from one part of the country to another. These gaps are often called passes. The gap between the Cumbrian Group of mountains and the Pennine Range is called Shap Fell; and along this pass travellers and traffic have gone for many hundreds of years. These passes are often very windy, and sometimes in the winter-time they are filled up with drifted snow. If the pass is very narrow, and between high rocks, it is called a gorge. Such a pass often has a torrent dashing down through it and tumbling from rock to rock.

"The wind howls through the mountain pass
And drives in gusts the flakes of snow;

Tis a rough night! But there, alas!

The weary way-worn travellers go."

nee'-dle	sad'-dle	val'-ley	Cum'-bri-an
Lang'-dale	dis'-trict	Win'-der-mere	dash'-ing
re-mem'-ber	Gram'-pi-ans	But'-ter-mere	tum'-bling

Lack, want.

Pike, a sort of lance with a long wooden shaft.

Group, a number coming close together.

Traf-fic, goods carried from one place to another.

Drift'-ed, blown into a heap by the winds.

Tor'-rent, a wild mountain stream.

## 17.—MY NATIVE HILLS.

I love the hills, my native hills,
 O'er which so oft I've strayed,

The shady trees, the noisy rills,
Where I so oft have played.
I love to feel the breezes blow
Upon the hills so free;
Where'er I am, where'er I go,
My native hills for me!

I love the hills, my native hills,
 All purple with the heath!
 I love the fields the farmer tills
 In the valley far beneath.
 When sunk in sweetest dreams I lie,
 I think those hills I see;
 Where'er I am, where'er I go,
 My native hills for me!—I). MILLER.

Sha'-dy noi'-sy pur'-ple val'-ley

Oft, often.

Heath, a small shrub which grows: flower.

## 18.—MOUNTAINS AND HILLS.—IV.

1. Volcanoes.—Volcanoes are burning mountains. They send out, now and then, black smoke, ashes, stones, cinders, and melted rock, which is called lava. There are no volcanoes in this country, but there were at one time—long, long ago. The

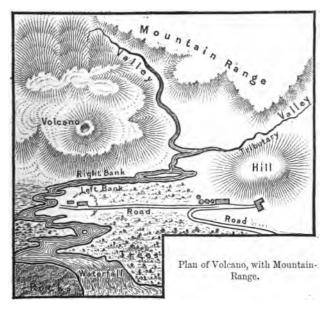
largest and most terrible volcanoes are in South America.

2. The Uses of Mountains.—(i) Mountains look useless, barren, and of no value to any one. But they are really of the very greatest use to man. First,



without mountains, there would be no slope in the land—all would be a dead level. This slope enables rivers to fall rapidly down into the valley. Without such a slope there would be no fall for brooks, rivers, and all kinds of streams. . . Secondly, mountains are the birthplace of springs and streams,

and are, therefore, store-houses of water. And they not only send us our streams of water, but they give those streams the force to fall. We find, if we look at different kinds of mountains, that the rivers which come from the highest mountains have always



most water in them. In fact, the higher the mountain or range of mountains, the larger and more steady is the supply of water which comes from them to the rivers.

3. The Uses of Mountains.—(ii) A third use of mountains is to send down to the valley below fresh

supplies of new soil. This new soil is brought down by the mountain streams and torrents, which act as carriers. A river in flood is said to roar and rage, and it looks angry. But in fact it is very kind, for it brings, to the country below, the soil which enables it to bring forth large crops of wheat and other grains. Mountains also send down fresh air. A cold wind blowing from the high lands among the mountains often brings coolness to the people in the valley, where the air is hot and close. On the other hand, a range of mountains often shelters a fertile land from cold winds in spring and winter. Such a range prevents these winds from chilling the trees and stopping the growth of the young corn.

vol-ca'-noes	smoke	ter'-ri-ble	birth'-place
burn'-ing	cin'-ders	springs	cool'-ness

Rap'-id-ly, quickly.

Pre-vents', keeps back.

# 19.—THE PLAIN AND THE MOUNTAIN.—I.

1. One afternoon, in early summer, the Plain was lying quiet and happy in the warm golden sunshine. It began to think that it would like to have a talk with a very high Mountain that looked down upon it from a little distance. The Plain had long despised the Mountain for not growing crops of any

- kind. Indeed it had often doubted whether it was really of any use in the world at all. So it began in a low, but sweet voice: "May I ask you a question, Mr Mountain? I want to know of what use you are in this world of ours. No one down here seems to know much about you; you keep away from every one, and live all alone by yourself so high up in the air!"
- 2. "That may be true; but I am of very great use for all that," replied the Mountain. "Of what use, then?" returned the Plain. "You look so big and so proud. You lift your bare head far above the clouds, and you are the first to bid good morning to the rising sun. But the storms beat in fury upon your brow, the pelting rains drench your slopes; and raging torrents, white with fury, roar down your steep sides. Then you spread yourself out so much, and take up such a great deal of room in the world! What is the use of such a big giant, that looks down upon all of us who live here in the lowly valley?"
- 3. "And you yourself," replied the Mountain, "may I ask of what use you are to this world?" "Oh," said the Plain, "you have only to open your eyes to know that at once. Can you not see the thousands of sheep and cattle that feed upon the rich grass I grow for them? Can you not see the fine crops of wheat I raise, the towns and villages

that stand upon my breast? Do you not notice the roads and railroads I carry for the good of the millions of people that live with me?"

- 4. "Yes," said the Mountain, "I see all that: I see it very plainly." "I am glad you do," replied the Plain. "It is very frank of you to say so. Come! go a little further, and confess something to me. Suppose this world were nothing but mountains, with their rocky slopes and vast barren sides, how could the good people we call human beings contrive to live? How would they get anything to eat?"
- 5. "Stop a moment!" said the Mountain; "not so fast, my hasty friend! Every one must play his own part in the world, and no single one can play all the parts. It is true that my sides are barren, and that I grow no wheat for the race of men. But what if it turned out that I gave you all that fertile land you now possess? What if it turned out that it is from me that all your wealth comes?"
- 6. "Indeed!" replied the Plain; "you surprise me much! I should be very much astonished to hear it! You give me my wealth! You supply me with rich soil! That would be a joke, Old Barrenhead!" "Come," replied the Mountain, in a rumbling voice, "no names! Let us at least be civil to each other. I am not joking. I do say

quite plainly that all your wealth comes from me."
"Prove it, then, if you can," said the Plain; "and
when you have proved it I will believe it."

gold'-en doubt'-ed pos-sess' as-ton'-ished sun'-shine bar'-ren sur-prise' rum'-bling

De-spised', thought little of.
Pelt'-ing, striking hard and fast.

Con-fess', to tell.
Con-trive', manage.

20.—THE PLAIN AND THE MOUNTAIN.—II.

- 1. "You spoke just now," replied the Mountain, speaking in a low and rumbling voice, "of the pelting rains that lashed my sides, and the foaming torrents that roared over my cliffs. Well, these rains loosen little pieces of soil from my rocks; and these torrents are the porters and the carriers that bring these pieces of soil down to you. Often and often do I send down scores of tumbling and foaming brooks, brown with rich mud. Then brooks fall into your rivers, and your rivers overflow their banks; and you do not seem to like it."
- 2. "Like it! I should think not! I don't like it at all," replied the Plain, very snappishly,—" a lot of nasty mud! That is what you spread over my pretty fields!" "Yes," quietly answered the Mountain: "but the mud makes your fields richer. The mud gives you new soil for the crops you grow

- —for the crops you are so proud of. . . It is I too who give you your rivers!"
- 3. "You give me my rivers! There is another of your odd ideas! You are at your joking again! I would have you to know that my rivers are my own, and I am very proud of them. They brighten my fields, bring water for the folk I feed, and carry boats and ships upon their breast."
- 4. "All very fine and very true," replied the Mountain; "but I don't think a river would be of much use without plenty of water. And this supply of water must be kept up day and night, week in week out, from year's end to year's end. And where does the water for your rivers come from?" "Well, after all, I think they must come from you," replied the Plain, very frankly.
- 5. "Certainly they do. I keep my sides tilted up, in order that the water may fall quickly down into your river-beds. But I don't send it all down at once. When heavy showers of rain fall upon my sides, I hide away a great deal of the water in hollows under the rocks. This water rises up in springs, which send out clear cool streams, welling forth day and night even in the hottest summer. And so it is that, even in great heats, I don't let your streams run dry; and there is always a good deal of water in your rivers. And, as you know very well, this water goes to the roots

of your tall trees, feeds your growing corn, and keeps your rich grass strong and green and sweet for the sheep and cattle that feed upon it."

- 6. Then the Plain laughed, and spoke again very heartily: "O kindly neighbour, you are quite right after all! you are my best friend! I will not speak ill of you any more. Your head is so often veiled in clouds that I mistook you for a foe or a stranger. Now I see that it is to you that I owe not only all my wealth, but also most of my beauty. Forgive me, and let us be good friends from this time."
- 7. "Very good," replied the Mountain. "I am glad to see you have come to your senses. I'm not Old Barrenhead any more, eh? I am of some use! Who is it that speaks ill of his best friends? His name is not Mr Plain, I hope?" "Oh no!" said the Plain; "I see I was wrong. Let us shake hands, and say no more about it." Then the Mountain gave a great laugh that rang through all its glens and gullies; and the people in the plain looked up to the high mountain, and said that it thundered, and began to gaze at the dark clouds that lay heavy about the mountain-head.

i-de'-as

jok'-ing

sup-ply'

neigh'-bour

Por'-ter, one who carries. Snap'-pish-ly, ill-naturedly. Odd, strange.

Well'-ing forth, coming forth like a well.

Veiled, hidden.

## 21.—WATER AND ITS DIVISIONS.—I.

- 1. The Three Forms of Water.—We see water running or flowing in a brook or river. If the ground is steep or broken, the stream runs rapidly; if the ground is flat or level, it flows slowly and gently. This, then, is one form of water, and it is called running water. . . Again, we see water in a lake or in the sea. This is sometimes called standing water, though, as a matter of fact, the water in the sea is always moving and changing its place. The water in a lake, too, is always moving a little, though it seems to stand still. . Then there is solid water; for water is solid when it is in the shape of ice and snow.
- 2. The Ocean.—Just as the largest mass of land we speak of is called a continent, so the largest mass of water we speak of is called an ocean. An ocean is, then, the largest piece of water on the globe. There is, rightly speaking, only one ocean on the face of the globe; and the large masses of land we see are only islands in it. The water of the ocean is salt; and hence by far the greater part of the water on the globe is salt.
- 3. The Five Oceans.—The largest ocean on our globe is the Pacific Ocean. The word pacific means peaceful: and it got this name from the great sailor

Magellan, who was not troubled by any great storms when he crossed it. The Pacific lies between Asia and the two Americas, and it is so large that it could hold in its basin all the land in the world. This can easily be proved if we take pieces of paper, and cut them of the sizes of the continents. Then, laying these pieces of paper upon the part marked Pacific Ocean in the map, we shall find that they



The Oceans of the World.

nearly cover it. . . The second largest ocean in the world is the Atlantic. It lies between the Old World and the New World, and it is more sailed upon by ships and steam-vessels than any other ocean in the world. . . The Indian Ocean is a very warm ocean; and it lies to the south of Asia, and between Africa and Australia. . . The Arctic Ocean lies to the north of all the land in the world; and the Antarctic Ocean, which is opposite to it, lies in that part of the globe which is farthest south.

sol'-id con'-tin-ent Pa-cif'-ic At-lan'-tic sailed ves'-sels In'-di-an Arc'-tic

Peace'-ful, quiet; without storms.

Ma-gel'-lan, a great Dutch sailor—the first who sailed round South America into the Pacific Ocean.

Ant'-arc tic means opposite to the Arctic, or lying on the opposite side of the earth from the Arctic.

## 22.—WATER AND ITS DIVISIONS.—II.

- 1. Contrasts in the Five Oceans.—(i) The Pacific is very broad; the Atlantic is narrow. The Atlantic receives the water of the largest rivers in the world; the Antarctic Ocean does not receive the water of a single river. The Atlantic is the highway of ships, which are always crossing and recrossing its waters; into the Arctic Ocean not a single ship finds its way, unless it happens to be sent to find out something we do not as yet know.
- 2. Contrasts in the Five Oceans.—(ii) The Indian Ocean contains the warmest water, the Antarctic Ocean the coldest. The Indian Ocean is the most stormy in the world. Men have been blown out of the rigging of ships by the fearful winds that sometimes blow with furious and raging blasts over the waters of this wide ocean. The least stormy ocean is the frozen ocean in the north, called the Arctic.
- 3. Seas.—A sea is a large body of salt water, next in size to an ocean. Or we may say: an ocean

is a large sea; and a sea is a small ocean. An ocean being the largest division of salt water, a sea is the second largest.

4. The Sea-shore.—The land near the sea is called the sea-coast; but the land beside the sea, and the

sand or pebbles washed by the waves. is called the It is shore. sometimes also called the beach: and to draw a boat up on the shore out of reach of the waves is to beach it. The beach may be



A Sea on the Coast of England.

sandy, as it is at Deal, in Kent. Or, it may be pebbly, as it is at Brighton and at Hastings, in Sussex. Often, at the back of the pebbly beach, there are ranges of high chalk cliffs—such as we see at Dover, in Kent—or the chalk cliffs may be quite low, but still very plainly marked, as they are at Brighton.

nar'-row re-ceives' rag'-ing Sus'-sex peb'-bly Brigh'-ton di-vi'-sion beach

High'-way of ships, the ocean upon which most ships come and go. Re-cross', to cross again.

Rig'-ging, spars and ropes of a ship.

### 23.—BY THE SEA-SHORE.—L.

- 1. Last autumn Johnnie Nelson and his father were stopping at the sea-side. One morning, soon after they had come, the sun was shining brightly, and there was a brisk breeze upon the water. So both father and son agreed to take a walk to the end of the pier, and see the boats and ships as they left or came into the harbour, or as they sailed past on the high sea,—away to other parts of England, or to other lands.
- 2. As soon, then, as they had had breakfast, they put on their hats, buttoned their coats, and walked down to the end of the pier. There they met a nice-looking old sailor, and Mr Nelson began to talk with him. "What is the name," he asked, "of that lighthouse out yonder?" "It is called the Long-reef Lighthouse," replied the sailor. "There is a long low reef of rocks out there that you can't see at high water; but many a ship came to a sad end on that reef in a stormy night before the lighthouse was built upon it." "A reef! what is that?" asked

Johnnie. "Oh! just a long ridge or shelf of rocks," replied the old sailor.

3. "Then I suppose it sometimes blows pretty hard here?" said Mr Nelson. "Yes, indeed," replied the sailor, "it blows great guns often, sure enough. In the end of March and the beginning

of October we have terrible storms here. I remember one, on the 5th of March. when a ship from Hull was driven ashore here, and every man drowned. Numbed with cold, and dead beat with hard work and hunger, they dropped off the



A Shipwreck.

rigging one after another, poor fellows, and nothing could be done to save them!"

4. "But you surely have a lifeboat?" asked Mr Nelson. "Of course we have," replied the sailor; "but we had at the time no steam-tug, and we could not get the lifeboat up to the place in time. The wind was blowing a perfect hurricane." "I sup-

pose," said Johnnie, "that a hurricane is even stronger than a storm?" "Yes," replied the sailor, "the wind in a hurricane blows at the rate of eighty to a hundred miles an hour. It blows faster than any engine travels on the rails. In a storm the wind blows at the rate of fifty or sixty miles an hour." "What is a gale, then?" asked Johnnie. "A gale," replied the sailor, "is a steadily blowing wind that goes at the rate of about thirty miles an hour." "Then half a gale blows at the rate of about fifteen miles an hour?" said Johnnie. "Quite right, my lad!" replied the kindly sailor.

au'-tumn	bright'-ly	pier	hur'-ri-cane
stop'-ping	breeze	but'-toned	en'-gine

Au'-tumn, the season in which the harvest is gathered in. Brisk, pretty strong.

into the sea, which shelters a harbour from the winds and is useful in loading and unloading ships. Pier, a long platform or wall built out | Numbed, powerless with cold.

# 24.—BY THE SEA-SHORE.—II.

1. "And I suppose the waves are very high in a storm here?" went on Mr Nelson. "Yes: I have seen them break right over the gallery of the light-Then, as the billows break upon the reef, no boat could live in the surge-not even the life-"What do you mean by surge?" asked boat!" Johnnie. "The surge is the broken and tumbling water. We call the high wave, as it comes on, a swell (some people call it a billow); when it is broken, it is called a surge."

2. "And you have very high tides here too, I believe?" asked Mr Nelson. "Oh yes! we have high spring-tides that at times flood some parts of

the town; and I have seen, in the lower parts, boats needed to cross the streets; but that very seldom happens." "Thank you very much for what you have told us! Now we must go --- good morning!" said Mr Nelson; and, taking his little boy by the hand,



A Storm at Sea.

they left the pier to take a walk along the coast.

3. As they went, Mr Nelson told his little son something about the tides. "When the tide is going out," he said, "it is called the ebb; when it is coming in, and is filling the harbour, it is called the flow. A very high tide is called a spring-tide;

and the lowest kind of tide we have is called the neap-tide."

4. Then they went down to the beach, and Mr Nelson showed Johnnie how the sand was made up of very very small pieces of rock or stone, and also of broken shells. And Johnnie went to the pretty clear



The Sea-shore.

pools, and tried to catch the small fish, and crabs, and He caught two fish with his hands, and shell-fish. one crab, and went home very proud and very happy. And father and son sat down to dinner as hungry as hawks, and enjoyed chatting about what they had seen and heard in the course of that morning.

•	
01111	nogo
bup	-pose 1t'-house
1· 1	
1101	it'-noiise

tum'-bling be-lieve'

bro'-ken din'-ner

en-joyed' course .

### 25.—EVENING BY THE SEA-SHORE.

- The wide curved strand of cool grey sand,
   Lies like a sickle beside the sea;
   The tide is low; but soft and slow
   "Tis creeping higher up the lea.
- The sea-gulls fleet, with twinkling feet, Walk all together to and fro,
   And sip and chat of this and that Which you and I may never know.
- Each higher wave doth touch and lave
   A million pebbles smooth and bright;

   At once they grow a beauteous show,
   With various colours all bedight.
- 4. Far out at sea, the ships that flee
  Along the dim horizon's line,
  Their sails unfold like cloth of gold
  Bathed in the sunset's light divine.

J. W. CHADWICK.

curved

creep'-ing

to-geth'-er

mill'-ion

Strand, the shore or beach. Sick'-le, a reaping-hook. Lave, wash. Be-dight', dressed or adorned. Ho-ri'-zon's line, the line where sca and sky seem to meet.

### 26.—WATER AND ITS DIVISIONS.—III.

1. Gulfs.—A gulf is the largest opening of the sea into the land. A gulf is a piece of water that runs very far into the land. The largest gulf in



A Gulf.

the world is the Gulf of Mexico, which lies to the south of North America. The name gulf is never given to any opening on the coast of England; the most usual word in our country for

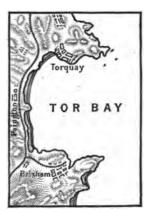
such openings is bay.

2. Bays.—An opening into the land that has a wider mouth than a gulf is generally called a Bay. The largest bay in the Old World is the Bay of Bengal, which is indeed a great sea. The largest bay in Europe is the Bay of Biscay, a wide and stormy sea that washes the shores of France and Spain. The largest bay in our country is Cardigan Bay, which is a very wide opening on the west coast of Wales,

so wide that it washes the shores of three counties. The prettiest bay in England is said to be **Tor Bay.** Red cliffs, fairy nooks crowned with ferns, masses of lovely trees, odd-shaped rocks, and one of the bluest seas in the world, make this bay the haunt of many persons, who come to its charming shores in search either of health or of healthy pleasure.

3. Harbours and Havens.—Bays and gulfs, which are well sheltered from the fury of the winds and

waves, make very good havens or harbours. Thus the beautiful bay called Plymouth Sound-with its lovely hills, dotted over with woods and villagesforms one of the finest harbours in England. It is protected from the waves and strong south-west winds by a breakwater which is nearly a mile long. ... Southampton, one of

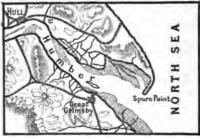


A Bay.

our most rising seaports, stands at the head of a gulf which runs far into the land, and which is called Southampton Water.

4. River-mouths.—The inlets into the land that form the best openings for shipping and for trade

in our country are the mouths of rivers. The three great rivers up the mouths of which most sailing vessels and steam-ships go, are the **Thames**, the **Mersey**, and the **Humber**. On the Thames stands



A River-Mouth.

the great port of London; on the Mersey, the great port of Liverpool; and on the Humber, the port of Hull. The mouths of the **Tyne** and

the Avon are also good harbours. On the Tyne stands Newcastle; and on the Avon, the famous port of Bristol.

ope'-ning pret'-ti-est gen'-er-al-ly shel'-tered break'-wa-ter sea'-ports South-amp'-ton ship'-ping

U'-su-al, common. Nooks, corners. The haunt of many per'-sons, a place where many people go to.

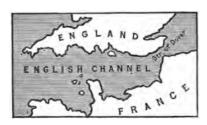
## 27.—WATER AND ITS DIVISIONS.—IV.

1. Estuaries.—When the tide from the sea runs up the mouth of a river, such an opening is called

an Estuary. The three greatest and most useful estuaries in England are the mouths of the Thames, the Severn, and the Mersey. In Scotland, an estuary is called a Firth.

2. Straits.—A strait is a narrow neck of water joining two seas. Just as an isthmus is a neck of land which joins two large masses of land, so a strait is a neck of water which joins two large masses of sea. The Straits of Dover join the North Sea and the English Channel. The Straits of Dover—while joining two seas—also separate the two countries of England and France. Thus we see that a strait separates lands and joins seas.

3. Channels. — A passage between two seas that is broader than a strait is called a Channel. Thus, when we go south through the Straits



Channel and Straits.

of Dover, we come to the English Channel, which joins the German Ocean and the Atlantic. Again, St George's Channel joins the Irish Sea and the Atlantic; and its waters separate Wales from Ireland. Scotland is separated from Ireland by the North Channel, which is almost narrow enough to be called a strait.

A passage 'tween two seas is called a Strait, Through which ships go as through an open gate. A Channel is a wider strait: we see The English Channel spreading broad and free.

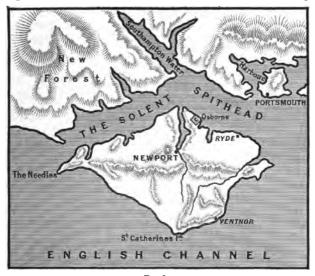


The Chief Divisions of Water.1

4. Roads.—There are roads in the sea! They are called roads because ships ride at anchor in them.

<sup>&</sup>lt;sup>1</sup> The above map contains most of the geographical terms explained in this book.

That is, roads are calm belts of sea, where ships can drop their anchor, and ride in safety from both winds and waves. The calmness of these belts of water comes from the fact that on the sea-ward side of them lies a row of sandbanks. These keep the high and heavy waves from rushing in and striking



Roads.

against the ships. These sandbanks form, indeed, natural breakwaters; and the great waves, called breakers, break upon them, and not upon the ships.

5. Famous Roads.—The most famous Roads or Roadsteads on the coast of England are the Yarmouth Roads, off the coast of Norfolk. Another famous

roadstead is the quiet stretch of water called Spithead, which lies between the Isle of Wight and Hampshire. It is so safe and quiet that our English sailors have called it the "King's Bedchamber."

es'-tu-ar-y
Thames

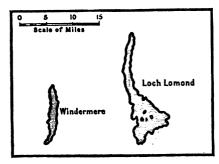
Mer'-sey strait pas'-sage chan'-nel spread'-ing calm'-ness

Sep'-ar-ate, keep apart; divide.

| Sea'-ward side, the side next the sea.

#### 28.—WATER AND ITS DIVISIONS.—V.

1. Lakes.—(i) A lake is a piece of water wholly



The largest Lake in England and the largest in Scotland.

surrounded by land. . . A pond is a small lake, and a lake is only a large pond. The lakes of England are not very large. The largest is

Windermere, a lovely lake in

the north-west. It is so lovely that it is called the Queen of the Lakes. It is the queen of all the lakes in that part of England, which has so many lakes that it is called the Lake Country.

- 2. Lakes.—(ii) A lake in Scotland is called a Loch; and the largest is Loch Lomond, which is also the largest lake in Great Britain. The largest fresh-water lake in the whole world is Lake Superior, in North America. It is so large that it could hold the whole of Ireland.
- 3. Salt-water Lakes.—In the lakes of our country the water is always fresh. But in some parts of the world there are many lakes of salt water, from which the people get large supplies of salt. Such lakes are found in the south of Russia. If a lake of salt water is very large, it is sometimes called a sea. Thus the Caspian Sea is a vast lake. It is the largest salt-water lake in the world, and is nearly four times as large as the largest fresh-water lake—Lake Superior in America.
- 4. Marshes.—A wide piece of wet, soft ground, covered with shallow water, is called a marsh or swamp. In Ireland it is called a bog; and in the east of England a fen. There was at one time a moor lying outside the walls of the city of London, and hence we have the name Moorgate; and, to the east of this moor, there lay a fen, and hence the name Finsbury, which is given to that part of London which lies north of the City.
- 5. Rivers.—A river is a large stream of fresh water which is always moving from high ground to lower ground—always moving on to an ocean, a sea, a

Or we may say: a large lake, or another river. stream of fresh water which drains the land and flows into an ocean, a sea, or a lake, is called a river. . . Very often, one river flows into another. Thus the river Ouse, which flows through the lovely plain of York, falls into the Humber; and the Trent comes a long way from the south to meet it, and at length falls into the same river. . . The largest river in England is the Thames; and it is also the river up which most ships sail. The river which floats the largest ships, however, is the short river Mersey, on which the great port of Liverpool stands.

whol'-ly	Su-pe'-ri-or	marsh	riv'-er
sur-round'-ed	sup-plies'	$\mathbf{swamp}$	drains

Shal'-low wa-ter, water not very deep. | Moor, a large tract of waste land Cas'-pi-an Sea, a large sea or salt-water lake between Europe and Asia.

without trees, and with very little

# 29.—A BROOKLET.

Born on a rugged mountain, The child of April showers, And cradled in a fountain. With curtains of wild flowers. I leaped into the sunshine, I hurried down the hill,

I raced and danced and tumbled, A prattling foaming rill.

I sang by grassy islands,
By woods and fields of corn;
I sang, while heaven was smiling
Upon my birthday morn.—M. JAMES.

A'-pril foun'-tain leaped tum'-bled show'-ers cur'-tains hur'-ried heav'-en

Cra'-dled in a foun'-tain—that is, mountain spring. the small brook takes its rise in a Prat'-tling, noisy.

## 30.—WATER AND ITS DIVISIONS.—VI.

1. Parts of a River.—(i) A river very often rises in one or more springs on the side of a mountain. Such a spring is called its source. The Thames rises in the Seven Springs, on the Cotswold Hills. The little rills or streamlets which run down from these springs join together; a brooklet—and then a brook grows out of them. Several brooks join; and then there is a rivulet or small river. . . In the north of England a brook is called a beck; and in Scotland it is called a burn. In England, too, a brook was at one time called a burn; for brooks called the West Burn and the Ty-Burn flowed into

the lake (in Hyde Park, London) which we now name the **Serpentine**. Hence come the names Westbourne Terrace and Tyburn Gate, which was the old name for a gate that stood where the Marble Arch now stands.



A Mountain Stream.

2. Parts of a River.—(ii) When one river falls into another, it is called a tributary; because it seems to pay tribute to the larger river. If a river in its course comes to a cliff or sudden steep fall on the side of a hill, the water makes a great leap over the cliff; and this leap is called a waterfall. If the ground is steep and broken before the river comes

to the fall, it flows very rapidly; and the swift and broken waters above the fall are often called rapids. . . The end of a river where it enters the sea is called its mouth. The mouth of the Thames is at Gravesend. The mouth of the Tyne is at



Picture of Water-Divisions.

Tynemouth. If the tide runs up the mouth of the river, then it is called a tidal river. The Thames, the Severn, and the Humber are the three chief tidal rivers in England.

3. Parts of a River.—(iii) The water of a river runs

here and there,—to the right and to the left, winding in and out, but always trying to find the lowest ground. And when the river reaches a level plain, it winds about still more, and makes its way to the sea in a line like a large number of S's linked on to



Plan of Water-Divisions.

each other. The road taken by a river is called its course. . . The higher part, where it often flows down the side of steep hills or mountains, is called its upper course. The middle part, where it still flows fast, but not so swiftly as before, is called the middle course; and the lower part, where it winds about

through the broad level plain, is called the lower course. . The upper course, then, is always the swiftest; and the lower course is the slowest of all the parts of a river.

source brook trib'-u-tar-y rap'-id-ly tid'-al low'-est linked swift'-est

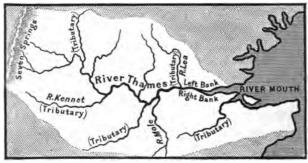
Stream'-lets, little streams. So brooklet is a little brook; rivulet, a little A lev'-el plain, a flat piece of ground.

#### 31.—WATER AND ITS DIVISIONS.—VII.

- 1. Parts of a River.—(iv) The ground along which the river flows is called its bed. The land touching the stream on either side is called its bank; and of course a river has two banks. If we stand on a bridge which spans the river, and look down the stream, the bank on our right hand is called the right bank; that on our left is the left bank. Thus Surrey and Kent are on the right bank of the Thames, while Middlesex and Essex are on the left bank. Again, Windsor Castle is on the right bank of our noble river, while Eton stands on the left bank.
- 2. Parts of a River. (v) A part of a river where men or horses can cross by wading is called

a ford. But, if the water is too deep for that, then those who want to cross get into a large boat, which is rowed across or pulled along a chain or rope. This kind of passage across a river is called a ferry.

3. River-Basins.—(i) If we could travel up the valley of the Thames in a balloon, keeping right above the main stream all the way, and if it were clear weather all the time, we should be able to see a very wonderful sight. We should see streams coming from the right and from the left—coming down



A River-Basin.

from the rising grounds and the hills—and all making their way down the sloping ground into the Thames. And as we travelled up the valley, we should see the river itself growing smaller and smaller, until at length we saw only the little stream that flows out of the Seven Springs. Now, all the land we should see on the right and the left is the

land that is drained by the Thames and its tributaries, and is called the Basin of the Thames.

- 4 River-Basins.—(ii) This land has rising ground on both sides all the way. It is like a large shallow trough open at one end. The open end is the end where the river falls into the sea. . . A river-basin, then, is the land drained by a river and all the streams that fall into it. A river-basin is often very like a leaf. If we take the leaf of a tree and look carefully at it, we shall see that the thin veins at the sides are like the tributaries; and the thick stalk in the middle is like the main stream. Some river-basins are shaped like the leaf of an oak, some like the leaf of an elm, some like the leaf of a plane-tree, and others like other leaves.
- 5. Watersheds.—If we look at the ridged roof of a house, we shall see that, when rain falls upon it, the water is *shed* to the one side and to the other side. Part of the water goes one way and part the other way. It is the same with the watershed of a river-basin. The rain which falls upon it is shed on the one side into one riverbasin; on the other, into another river-basin. Part of the water goes down the one slope, another part goes down the other slope. The ridge of high ground, then, which forms the edge of a river-basin is called its watershed.

Mid'-dle-sex Windsor (Win'-sor) touch'-ing wad'-ing ball-oon' won'-der-ful slop'-ing drained trough wa'-ter-shed ba'-sin

Spans, stretches across.

Ridged, sloping down on different sides.

## 32.—THE LIFE OF A RIVER.—I.

- 1. Introduction.—Let us try to trace the life of a river from its source to the sea. Let us follow its course from the point where it is so small that we can easily stride across it, to the place where it has become so broad that you must take a steamer to get from one side to the other.
  - "Come! let us view the river from its source,
    Whence it wells out with tiny infant force,—
    So small and thin, that it is hardly seen,
    A line of silver 'mid a fringe of green."
- 2 The Source.—Many of our English rivers begin in clear springs, which are found upon the sides of hills or the slopes of mountains. A rill of clear water runs out of the cool spring; and this is the beginning of the stream that—gathering the water of other streams as it goes—in time grows into a mighty river. The beginning of a river is called its source; and the source of a river is sometimes a spring and sometimes a lake.

"Where height o'er height uprises—
Tall crag and cliff and steep,
The mountain streams are rushing
So strong and full and deep;
Rushing and hurrying downward,
With never ceasing flow,
Roaring and tumbling and falling
Down to the stream below."

3. The Watershed.—The water that fills the spring comes from the sky. When rain falls on the side of a hill or mountain, most of it runs at once down the hillside. But some of it is stored up in little holes and openings among the rocks underground, and these are hidden springs, from which the water wells out clearly and slowly. If we walk on the ridge of a hill, we shall see two slopes, just as we see two slopes on the roof of a house. When the rain falls on the ridge, part of it runs down the one slope, and part of it down the other. This ridge is called, as we have already learned, a watershed.

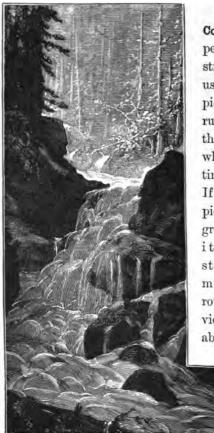
"River! river! little river!

Bright you sparkle on your way;
O'er the yellow pebbles dancing,
Through the flowers and grasses glancing,
Like a child at play."

source eas'-i-ly fringe un'-der-ground hid'-den spar'-kle

yel'-low glanc'-ing

# 33.—THE LIFE OF A RIVER.—II.



The Upper Course of a River.

1. The Upper Course.—The upper course of a stream or river is usually very rapid; because it runs over ground that has a slope, which is sometimes very steep. If a rock or a piece of rising ground comes in its way, the stream has to make a turn round it. It divides into two above the stone,

and then
the waters meet
a g a i n.
B u t,
though it

makes a good many twists and turns as it goes, the upper course of a river is always straighter than its middle course, and much straighter than its lower course.

"Down the hill it comes springing, Flying and flinging, Turning and twisting. Eddying and frisking, As it tumbles and gushes Through shivering rushes;-Or round the rocks darting, Now meeting, now parting,-Here it goes hurrying, There it runs skurrying. And so, day and night, for ever 'twill go. For it must find its way to the valley below."1

#### 2. A Waterfall .-

Sometimes a stream comes to a ledge of steep rock, over which it leaps. This fall of the river over the face of a steep cliff is called



A Waterfall.

In the north of England it is called a a waterfall. Where there is a waterfall the rocks are force.

<sup>1</sup> Southey (adapted).

generally very hard; for, if the rock is soft, the rapid stream, in time, eats out a course for itself. It is generally on the upper course of a river that waterfalls are found, and in some countries the water throws itself over a height of more than a hundred feet.

> " From lofty cliffs the river leaps-Cliffs to whose sides the ivy clings-And sends down o'er the rocky steeps The waters of a hundred springs."

- 3. The Pool.—When a great mass of water falls over a rock, it makes for itself, in course of time, a deep basin or pool, round the sides of which the water goes swirling and whirling-until at length it escapes from the pool, and rushes away down the valley.
- 4. Tributaries.—The streams that come from the right and from the left and fall into the main river are called feeders or tributaries; because, as we have seen, they are like nations that pay tribute to another people or nation that is stronger and greater than they are. The nation pays a tribute of money: the stream pays a tribute of water. Each tributary gives water to the larger stream into which it falls.

piece straight'-er hur'-ry-ing main twists shiv'-er-ing whirl'-ing na'-tion

Ed'-dy-ing, making little circles. Rush'-es, long grass growing on wet Frisk'-ing, sporting. ground.

E-scapes' from, gets out of.

#### 34.—A MOUNTAIN STREAM.

- Darting hither, thither,
   Like a child at play,
   Mountain stream comes dancing
   Down its rocky way.
- Swift through rocky narrows
   Whirling waters gush;
   Jostling each the other,
   Wavelets onwards rush.
- 3. Over rocky fall, then, Down the waters go Into boiling caldron, Foaming white below!
- 4. On through fairest meadows, Where the hay lies spread, And the thick-leaved branches Shade the stream o'erhead.
- Past the mossy islands,
   Through the meadow grass,
   Where the flowers are drinking
   As the waters pass.
- So, for ever rushing,
   Goes the mountain stream,

On! beneath the sunlight, Or the moon's pale gleam,

Till the river reaches
 Sounding shore of sea—
 And its course is ended,
 Course so strong and free.

dart'-ing

boil'-ing

mead'-ows branch'-es be-neath'

Gush, flow out quickly.

Jost'-ling, pushing.

Wave'-lets, little waves.

Cal'-dron, a large kettle (here used of a deep rocky pool).

# 35.—THE LIFE OF A RIVER.—III.

1. The Middle Course.—The middle course of a river is more or less rapid, as the ground over which it flows is more or less steep. If the river flows through a mountainous country, then its course is rapid. If it flows through a level country, its course is more slow, more useful to the country which it waters, and better fitted for boats sailing on it. In many parts of England, noble trees have been planted on the banks of rivers in their middle course; and, as one rushes past on the railway, glimpses of the stream flash out here and there from between the trees.

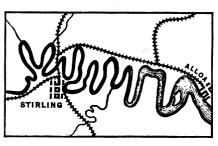
"Coyly stealing from the view
Softly thou glid'st, O gentle stream!
And on thy waves, the green leaves through,
Flickers the light of summer-beam."



The Middle Course of a River.

2. Boats on the River.—It is on the middle course that one sees most often boats plying up and down—boats driven by oars or urged along by sails. Thus the middle course of the Thames is crowded with pleasure-boats—some driven by six or eight rowers, others pushed gently along by pretty white sails, and some drawn by ropes up the stream. On a fine summer day there is no gayer sight than a long reach of the middle Thames.

- "Where Thames along the daisied meads His wave in sunlit reaches leads, There, sailing up or down, we meet Of pleasure-boats a glancing fleet."
- 3. The Lower Course.—(i) When a stream has reached its lower course, it usually finds itself in a broad level plain. Then its course is very slow and twisted, and its banks are full of water. It is this part of its course that is of most use. For now it becomes a highway leading from village to village, and from town to town. Steamers ply upon it, boats and barges go up and down, and every reach of the river is a stirring scene of business and labour.
- 4. The Lower Course.—(ii) The slowness of the lower course through the level plain causes it to



The Windings of a River.

turn and twist and wind about —so much so, that, if we could see this part of the river from a height, it would look like a ser-

pent making its way in deep folds over the country. It seems to double back upon itself, as if it wished to linger for ever among the fair fields. The river-

windings of the Wye in the lower part of its course are very famous; and the twistings of the river Forth, in the middle plain of Scotland, are so numerous that it takes 20 miles of course to go 5 miles of distance.

mid'-dle	flick'-ers	business	ser'-pent	
fit'-ted	reached	( <i>biz'-ness</i> )	doub'-le	
rail'-way	vil'-lage	la'-bour	wind'-ings	
Ply'-ing, sailing.		Stir'-ring, very busy.		

#### 36.—THE LIFE OF A RIVER.—IV.

To lin'-ger, to stay.

1. Floods.—A river has not always within its banks the same quantity of water. Sometimes it has a great deal; at other times it has very little. When no rain has fallen for some weeks, the water in a river gets very low. After heavy rains, again, there is often too much water. Then the river overflows its banks, and spreads its waters over the lower lands on each side. In general, our English rivers are full of water, and seldom run very low. But too often they are swollen by heavy rains; and then we see wide tracts of country turned into large Thus the lower valley of the Trent is often flooded with water; the level Plain of York sometimes looks like a sea. The valley of the Thames is sometimes covered with water for more than a mile

on each side of the river. The lower course of the Severn now and then rises above its banks, and the land on both sides is under water for many miles. In the last months of the year 1882, the Thames overflowed its banks far and wide. The young men in Oxford brought out their boats, hoisted their sails, and flitted about in all directions over the fields.

"The floods are out upon the level fields,
And, where men ploughed, the white-sailed boats can go;
Another prospect now the valley yields—
The sight of wherries darting to and fro."

- 2. The Sea.—At last, after a long and varied journey, our river reaches the sea; and its waters mingle silently with the waters of the great ocean that girds the world. Almost all the rivers of the world go into the sea; and yet the sea is not full. Why is this? Because, beneath the warm rays of the sun, there are always going up into the air millions on millions of small drops of water. These small drops make clouds; the clouds fall in rain; the rain makes rivers; the rivers fall into the sea. From the sea, again, rise up countless drops of water—and so this goes on, without stopping, day after day, and year after year.
- 3. The Work of Rivers.—The chief work of a river is to bring down, from the hills and mountains, fresh soil for the fields and valleys. The running water,

as it rushes over the sides of a hill, loosens very small pieces of soil from the land over which it flows, and carries them off. When it becomes slower in its movement, it drops them here and there as it goes along. Thus we may think of a river as a kind of quarryman,—digging out of the ground little bits of rock and soil. Or we may look on it as a carrier,—bearing them on his shoulders into the lower valleys. Or we may think of it as a gardener,—covering the old and worn-out ground with fresh soil, which will produce for us fresh crops and better fruits.

4. The Uses of Rivers.—A river has very many uses, and is one of the most kindly powers on the face of the earth. Rivers supply water-fresh and cool water—to the people of the towns and villages that stand upon their banks. They keep the meadows through which they flow green for the feeding of flocks and herds. . . They are the oldest and cheapest highways. They are the cheapest highways; for a horse can draw upon water twenty times as much as he can draw upon land. . . Rivers also drain the land. If the rain that falls upon the fields were not carried off by rivers, it would lie there in large pools, the ground would become sour, and nothing would grow upon it. . . All the largest towns are built on the banks of rivers. Thus we find London on the Thames, Liverpool on the Mersey, Hull on the Humber, and Bristol on the Avon.

quan'-ti-ty flit'-ted si'-lent-ly shoul'-ders some'-times count'-less ploughed gar'-den-er swollen va'-ried loos'-ens cov'-er-ing tracts reach'-es move'-ment cheap'-est

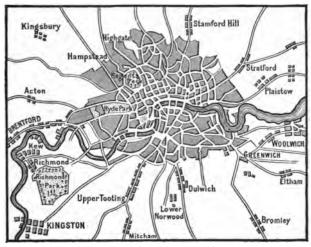
Flood'-ed, covered. Hoist'-ed, put up. Pros'-pect, view or sight. Yields, gives. Wher'-ries, little boats. Min'-gle, mix.

Girds, goes round.

# 37.—POLITICAL DIVISIONS.—I.

- 1. A Country.—"We live in England, do we not?" said Freddy Jones one day to his father, as they sat at tea in the evening. "Yes," replied his father; "we live in England—a country that is the southern half, and the larger half, of the island of Great Britain. And Great Britain is an island that lies off the continent of Europe." "What is a country?" asked Freddy. "You surely know that," replied his father. "A country is a piece of land, with a name of its own and a people of its own. Our country is England, and the people are called English; just as to the north of us, we have Scotland and the Scotch; and to the west of us, Ireland and the Irish."
- 2. The Capital.—"And the capital of England is London—the big town that we live in?" "Quite right," said Mr Jones. "But what do you mean by

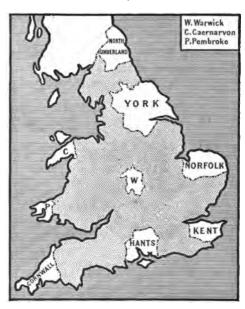
capital?" asked Freddy. "Is it the largest town in the country, or the richest, or what?" "Well," replied Mr Jones, "it is the chief town; and London, our capital, happens to be also the largest and richest town in the country. But this is not always the case. For example, Edinburgh is the capital of Scotland; but it is not half so large or so rich as Glasgow.



Plan of a Town and Suburbs (London).

3. Counties.—"What county is this we are in?" asked Freddy, still further. "We are in Middlesex," replied his father. "If you go east for a few miles you are in Essex; and if you cross the Thames from Essex, you will find yourself in the county of Kent. But if you cross the Thames from Middle-

sex—if you cross it by London Bridge or Westminster Bridge, or any of the great London bridges —you are in Surrey." "But what is a county?"



A few English Counties.

asked Freddv. "Well. that would be a long story. But I may say in a few words that a county is the largest division of land after a country." "Which is the biggest county in England?" "York,"

replied his father; "York is the largest; and Rutland is the smallest."

4. County Towns.—"And have counties capitals as well as countries?" went on the little boy. "Certainly they have. But they are not called capitals; they are called county towns." "And what is our county town?—London, is it not?" "Oh

no! it is not. It is a little town called Brentford, west from here, and farther up the Thames." "Then the capital of a county is not always the largest town—any more than the capital of a country?" "No," replied the father. "For example, York is the capital of Yorkshire; but it is not nearly so large as Leeds, or Sheffield, or Bradford, or even Hull. Again, Lancaster is the capital of Lancashire; but there are in the county many towns very much larger than it. Manchester is more than twenty times larger than Lancaster; and so is Liverpool."

south'-ern

con'-ti-nent

cap'-i-tal

big'-gest

Mid-dle'-sex, Es'-sex. Sex here stands for Saxons. When the Saxons came to this country the places where they lived were called after them. There were the Middle Saxons, the East Saxons, and the South Saxons;

and these places are now known by the names of Middlesex, Essex, and Sussex. Di-vi'-sion, a part cut off from the rest.

# 38.—NOW THE SUN IS SINKING.

Now the sun is sinking
 In the golden west;
 Birds, and bees, and children,
 All have gone to rest;
 And the merry streamlet,
 As it runs along,
 With a voice of sweetness
 Sings its evening song.

2. Cowslip, daisy, violet, In their little beds, All among the grasses, Hide their heavy heads. There they are, sweet darlings! Sunk in happy dreams, Till the rosy morning Wakes them with its beams.

sink'-ing chil'-dren sweet'-ness eve'-ning

dai'-sy dar'-lings

hap'-py morn'-ing

Gold'-en, bright yellow, of the colour | of gold. Cow-slip, a sort of primrose, but with several flowers on one stalk. Vi'-o-let, a small flower which grows | Beams, rays of light.

generally at the roots of hedges. There are blue and white violets. Ro'-sy, red and bright, of the colour of the rose.

# 39.—POLITICAL DIVISIONS.—II.

1. Suburbs.—" And what is a suburb?" Freddy went on to ask. "A suburb," replied his father, "is part of a town. It is a part of a town that lies outside the chief body of the town. A suburb often has a good deal of open country mixed up with it. Thus Notting Hill is a suburb of London in the west; and Stratford is another suburb of London in the far east."

- 2. Villages.—"And what comes next to a town?"
  "Well, I suppose a village," replied his father.
  "For example, when you walk west out of London on the Uxbridge road, you come to the village of Acton." "And is there anything smaller than a village?" asked Freddy. "Yes," replied his father, "a very small number of houses standing together is called a hamlet; and in the north of England it is called a thorpe." "Oh yes!" cried Freddy; "there is Bishopthorpe, not far from York; and Burnham Thorpe, in Norfolk, where the great sailor, Lord Nelson, was born."
- 3. Railways.—" Now, let me ask you some questions," said Mr Jones. "How do you get from town to town?" "Oh!" replied Freddy, "you can walk; or, if it is a long way, you can go by the railway." "Quite right, "said his father. "And when the train suddenly plunges into darkness, and you hear a roaring all round you, what do you call that?" "Well, I should say I was in a tunnel." "Very good; and when you get out into the light again, and see steep banks sloping up from the line, what is that?" "Oh! that is a cutting; and it tires your eyes a good deal to look at it." "But if you are crossing a low plain or a river valley, and out of the window you see all the country below you, what kind of line are you travelling on then?" "I should say," replied Freddy, "that I was running along an

embankment or a long viaduct." "Then do you know what a viaduct is?" "I think I do," said Freddy; "it is just a great number of bridges built close to each other."

4. Canals.—"But," asked his father, "if you had a great deal of heavy goods to send to any distant town, would you send it by railway?" "No," said Freddy, "I don't think I should; it would cost a great deal too much. I should send it by canal. I know it would take a longer time to go; but it would not cost nearly so much. Are there many canals in England?" asked Freddy. "Yes," replied his father, "there are a great many. Almost all the large towns and cities in England are linked together by canals; and barges can go from one river into another with very little trouble. Thus the two great towns of Leeds and Liverpool are joined by the Leeds and Liverpool canal; while the rivers Trent and Mersey are joined by the Trent and Mersey canal." "So," said Freddy, "what with canals, and railways, and good roads, England is very well off for ways of getting about, and of carrying things from one place to another." "Quite right," said his father; "better off than any other country under the sun."

sub'-urbthorpetun'-nelbrid'-gesmixedquest'-ionscut'-tingLiv'-er-poolham'-letroar'-ingem-bank'-mentMer'-sey

Vi'-a-duct, something built up to form a way over a plain or a river.

Can-al', water-ways cut through the Dis'-tant, far away.

#### 40.—ENGLAND.

- Land of rivers! moving down
   Slow through forest, farm, and town,
   With their tributary streams,
   Beautiful in glooms and gleams,—
   Land of rivers! hail to thee!
- 2. Land of forests! wide thy vast
  And ancient oaks their shadows cast;
  Through the openings, far and near
  Run the startled fallow-deer,—
  Land of forests! hail to thee!
- 3. Land of meadows! where the flowers
  Mark with beauty all the hours,
  And the endless fields of wheat
  Ripen in the harvest heat,—
  Land of meadows! hail to thee!
- 4. Land of cities! true and strong
  Throbs their life thy veins along;
  Proud thy ships sail o'er the wave
  With the gifts thy people gave;

  Land of cities! hail to thee!

5. Land of freedom! honest toil
Is the birthright of thy soil;
Honour it has won for thee,
Honour and prosperity.

Land of freedom! hail to thee!

mov'-ing beau'-ti-ful gleams an'-cient shad'-ows ope'-nings star'-tled flow'-ers ri'-pen proud free'-dom hon'-est

birth'-right soil hon'-our pros-per'-i-ty

For'-est, a large wood.
Trib'-u-kar-y (here an adjective), running into a river or larger stream.
Glooms, darkness.
Vast, very large.

Fal'-low-deer, a kind of deer smaller than the red or mountain deer, and of a yellowish-brown colour, spotted with white. Throbs, beats strongly.

Toil, work; labour.



#### DEFINITIONS.

- 1. A half-globe is called a Hemisphere.
  - There are two Hemispheres—the Eastern Hemisphere and the Western Hemisphere.
- Circumference is distance measured round a globe; Diameter is distance measured through.
  - The circumference of the earth is about 25,000 miles; the diameter about 8000 miles.
- 3. A Continent is a piece of land that contains several countries.
  - There are six continents: Europe, Asia, Africa, and Australia in the Eastern Hemisphere,—and North America and South America in the Western Hemisphere.
- An Island is a piece of land surrounded on every side by water.
   Examples: Great Britain, Isle of Wight, Isle of Man.
- The Mainland is the larger body of land off which an island lies.For example, Europe is the mainland for the British Isles
- A Peninsula is a piece of land almost surrounded by water.
   Example: Portland.
- An Isthmus is a narrow neck of land which joins one piece of land to another.
  - Example: Chesil Beach, which joins the peninsula of Portland to the mainland.
- A Cape is a piece of land which juts out into the sea. Examples: Land's End, Spurn Point.
- If a cape is high, rocky, or mountainous, it is called a Headland or Promontory.
  - Examples: Beachy Head, Flamborough Head,
- A Plain is a piece of land that is flat or level.
   Examples: Central Plain, Plain of York, Cheshire Plain.
- 11. A Valley is a plain edged with rising grounds and having a river flowing through it.
  - Examples: Valley of the Thames, Valley of the Severn.
- A Table-land is a high and broad piece of land raised above the surface of the earth.
  - Examples: Dartmoor and Salisbury Plain.
- 13. A Mountain is a very high piece of land that rises above, and stands out from, the high land from which it rises.
  Examples: Sca-Fell. Snowdon.
- 14. A rising ground, the top of which is 2000 feet above the level of the sea, is a Mountain; a lower height is called a Hill.
  - A Hillock is a small hill.
- A Chain or Range of hills is a line of rising grounds running through part of a country.
  - They are called also in England Downs, or Heights, or Wolds. Examples: North Downs, East Anglian Heights, Yorkshire Wolds, Pennine Range.

- 16. A gap between two mountains is often called a Pass; if the pass is narrow and rocky, it is called a Gorge.
- 17. A Volcano is a burning mountain.
- 18. An Ocean is the largest piece of water on the globe.

There are five Oceans—the Pacific, Atlantic, Indian, Arctic, and Antarctic.

- 19. A Sea is a large body of salt water next in size to an ocean.
  The land near the sea is called the sea-coast; the land washed by the waves is the shore or beach. Example of a sea: the North Sea.
- A Gulf is a large opening of the sea which runs far into the land. Example: Gulf of Mexico.
- A Bay is an opening into the land that has a wider mouth than a gulf.

Examples: Bay of Biscay, Cardigan Bay, Tor Bay.

- 22. An Estuary is the wide mouth of a river up which the tide runs.

  Examples: Estuaries of the Thames and Severn.
- A Strait is a narrow neck of water joining two seas. A Channel is broader than a strait.

Examples : Straits of Dover, English Channel.

- 24. A Road is a calm belt of sea where a ship may ride at anchor.

  Examples: Yarmouth Roads, Spithead.
- 25. A Lake is a piece of water entirely surrounded by land. Examples: Windermere, Loch Lomond.
- A River is a large stream of fresh water running from the land to the sea.

A Rivulet is a small river.

- The ridge dividing one river-valley from another is called a Watershed.
- 28. The streams that fall into the main river are called Tributaries.
  Examples: the Avon, tributary to the Severn; the Medway, tributary to the Thames.
- 29. A Country is a smaller piece of land than a continent, and has a name and people of its own.

Examples: England, Scotland, Ireland.

30. The Capital is the chief town of a country.

Examples: London, Edinburgh, Dublin.

- A County is the largest division of land after a country.
   Examples: Middlesex, Essex, York.
- 32. A County Town is the capital or chief town of a county. Examples: York, of Yorkshire; Lancaster, of Lancashire.
- 33. A Suburb is part of a town that lies outside the main body of the town.
- 34. A Village, and a Hamlet or Thorpe, come next in size to a town.

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